SOPA ADMIN NORFOLK SUBAREA/NAVSTA NORVA INSTRUCTION 3141.1F

Subj: DESTRUCTIVE WEATHER PLAN

Ref: (a) OPNAVINST 3140.24 Series

- (b) COMNAVAIRLANTINST 3141.1 Series
- (c) HRO Manual 94
- (d) COMNAVREGMIDLANT/SOPA (ADMIN) HAMPTON ROADS INSTRUCTION 3141.1 Series
- (e) COMNAVREGMIDLANTINST 3440.24 Series
- (f) NAVSTANORVANOTE 3440
- Encl: (1) Tropical Storm/Tropical Cyclone Condition of Readiness and Action Table
 - (2) Response/Recovery from Tropical Storm/Cyclone Conditions
 - (3) Hurricane Preparation Recommendations
 - (4) Initial Damage Assessment Report
 - (5) Condition Setting Message Format
 - (6) SITREP Format
 - (7) Emergency Power Plan
 - (8) Inundation Plan for Hurricane Categories II-IV
 - (9) Naval Station Disaster Preparedness Zone Team Areas
 - (10) Shelter Supplies
 - (11) Building Manager/Monitor Responsibilities
 - (12) Disaster Preparedness Working Party Materials List
 - (13) Communication Procedures
- 1. <u>Purpose</u>. To publish guidance and procedures to be employed by Department Heads/Special Assistants of NAVSTA NORVA, Regional Program Director Representatives and tenant commands/activities in the SOPA ADMIN NORFOLK SUBAREA for destructive weather (tropical storms, tropical cyclones, thunderstorms, tornadoes). This SUBAREA includes Naval Station Norfolk, Naval Support Activity, Craney Island, St. Julien's Creek Annex, Deperming Crib and Golf Anchorage.
- 2. <u>Cancellation</u>. SOPAADMINNORFOLKSUBAREA/NAVSTANORVAINST 3141.1E.

- 3. Background. References (a) and (d) prescribe the basic condition of readiness for destructive weather. Reference (b) contains the Naval Aircraft Hurricane Evacuation Plan for the Atlantic coastal area. Reference (c) concerns administrative management of civil service personnel and sets forth specific regulations for administrative dismissal during destructive weather periods. Reference (d) is intended for protection of the shore establishment and provides guidance/procedures to be employed by afloat commands upon the onset of destructive weather. Reference (e) is the Regional Disaster Preparedness Plan and delineates resources/equipment required during emergencies. Reference (f) is the Naval Station Norfolk Destructive Weather Telephone Tree and will be used to provide prompt weather advisories and rapid response when destructive weather is imminent. Enclosures (1) through (3) detail procedures and contain helpful information necessary for area commands to adequately prepare or recover from destructive weather. Enclosure (4) provides the format for reporting damage during destructive weather. Enclosure (5) is a sample attainment message format to be sent by SOPA ADMIN NORFOLK SUBAREA to SOPA (Admin) Hampton Roads. Enclosure (6) shows the format for submitting a SITREP to Commander, Navy Region Mid-Atlantic. Enclosure (7) covers actions for requesting emergency power. Enclosure (8) identifies the impact and flooding from a major hurricane and actions to be taken once a CAT II storm or greater is imminent. Enclosure (9) is a map of Naval Station Norfolk showing zone responsibility for Disaster Preparedness Division working parties. Enclosure (10) is a material list of necessary sheltering supplies. Enclosure (11) provides information and recommendations for building managers when securing facilities. Enclosure (12) is a material list of equipment required by working parties. Enclosure (13) covers communication procedures.
- 4. <u>Discussion</u>. Severe weather as described in reference (a) can occur at any time in the Hampton Roads area. Analysis of meteorological and oceanographic data for this area indicates that the most serious damage comes from storms of tropical origin such as tropical cyclones and tropical storms in which winds of destructive force are sustained for long periods of time. Storms of non-tropical origin (gales, thunderstorms, tornadoes) are of shorter duration and generally localized in nature. Figure 1-1 lists storm occurrences passing within 180 miles of Norfolk during the period 1886-1997. COMLANTFLT runs a HURREX late April and early May allowing commands to exercise their destructive weather plans. The annual hurricane season for the Hampton Roads area is from 1 June through 30 November. It is intended that

this instruction will supplement reference (d) and facilitate preparation and/or recovery within SOPA ADMIN NORFOLK SUBAREA jurisdiction as delineated in reference (e).

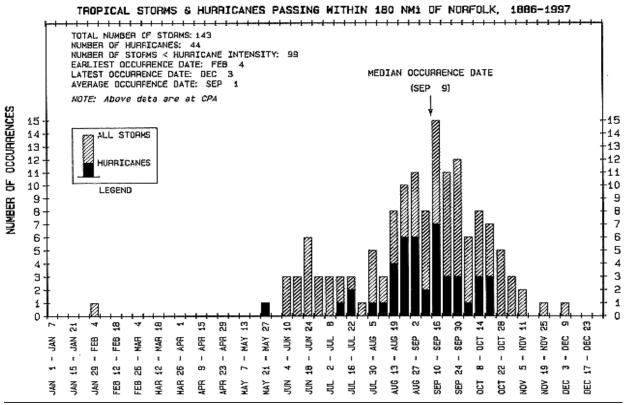


Figure 1-1

5. Definitions

- a. $\underline{\text{Destructive Winds}}$. Sustained winds of 50 knots or greater.
 - b. <u>Hazardous Winds</u>. Sustained winds of 35 to 49 knots.
- c. <u>Tropical Depression</u>. A tropical system with wind speeds to 33 knots that is expected to intensify. Tropical depressions will be identified by numbers, with the first tropical depression of the calendar year being Tropical Depression One.
- d. <u>Tropical Storm</u>. Tropical system with wind speeds from 34 to 63 knots. Tropical Storms will be issued names for tracking purposes with the first Tropical Storm of the calendar year being

issued a name starting with the letter "A" and proceeding through the alphabet with each sequential storm for the season.

- e. <u>Tropical Cyclone (Hurricane)</u>. Tropical system with wind speeds of 64 knots (74 miles per hour) or above.
- (1) <u>Category I</u>. Winds of 64 to 82 knots (74 to 95 miles per hour). Storm surge 4 to 5 feet above normal.
- (2) <u>Category II</u>. Winds of 83 to 95 knots (96 to 110 miles per hour). Storm surge 6 to 8 feet above normal.
- (3) <u>Category III</u>. Winds of 96 to 113 knots (111 to 130 miles per hour). Storm surge 9 to 12 feet above normal.
- (4) <u>Category IV</u>. Winds of 114 to 135 knots (131 to 155 miles per hour). Storm surge 13 to 18 feet above normal.
- (5) Category V. Winds above 135 knots (155 miles per hour). Storm surge more than 18 feet above normal.

f. Small Area Storms

- (1) Thunderstorm. Produced by cumulonimbus clouds and usually affect a small area. Thunderstorms are always accompanied by thunder and lightning and may produce large hailstones, strong gusty winds, and occasionally microbursts.
- (2) $\underline{\text{Tornado}}$. Tight rotary windstorm. Although small in scale, tornadoes are among the most violent storms with winds of over 200 knots possible.
 - (3) Waterspout. Tight rotary windstorm over water.
- (4) $\underline{\text{Gale}}$. A non-tropical windstorm with winds of 34 to 47 knots.
- (5) $\underline{\text{Storm}}$. A non-tropical windstorm with wind speeds of 48 knots or greater.
- (6) Nor'easter. A non-tropical cyclonic storm occurring on the east coast of North America, so called because the winds over the coastal area are from the northeast. Nor'easters may occur at any time of the year but are most frequent and most intense between September and April. They typically develop within 100 miles of the coast, generally progress northward to

northeastward and typically attain maximum intensity near New England and the Canadian Maritime Provinces. Abundant precipitation and winds of gale force or higher are associated with a Nor'easter.

g. Weather Watches

- (1) <u>Tropical Storm Watch</u>. Issued when there is a threat that Tropical Storm conditions will occur within 24 to 36 hours.
- (2) <u>Hurricane Watch</u>. Issued when there is a threat that hurricane conditions will occur within 24 to 36 hours.

h. Weather Warnings

- (1) <u>Small Craft Warning</u>. Harbor and inland waters are experiencing or are forecast to experience winds between 18 knots and 33 knots and wind driven waves of concern to small craft.
- (2) <u>Gale Warning</u>. Winds between 34 and 47 knots are forecast to impact land, harbor, and/or inland waters within 12 hours.
- (3) Storm Warning. Winds 48 knots or greater are forecast for land, harbor, and/or inland waters within 12 hours.
- (4) $\underline{\text{Thunderstorm Warning}}$. Thunderstorms are forecast to impact the designated warning area.
- (5) <u>Severe Thunderstorm Warning</u>. Severe thunderstorms (with wind gusts equal to or greater than 50 knots and/or hail 3/4 inch in diameter or greater) are forecast to impact the warning area.
- (6) <u>Tornado Warning</u>. Tornadoes have been sighted in or adjacent to the warning area or have a strong potential to develop in the warning area. (Note: Naval Atlantic Meteorology and Oceanography Center (NAVLANTMETOCCEN) does not issue tornado warnings via message due to minimal lead time and short lived nature of the event.)
- (7) Storm Surge Warning. High tides four feet or greater above normal tides are forecast for coastal areas, harbor, and/or inland waters. This warning will most likely be issued in conjunction with a major weather event.

- (8) $\underline{\text{Tropical Storm Warning}}$. This warning will be issued when winds of 34 to 63 knots are expected in the warning area within 24 hours.
- (9) <u>Hurricane Warning</u>. Issued when hurricane conditions (winds of 74 miles per hour or greater, or dangerously high water and rough seas) are expected in the warning area in 24 hours.

i. Tropical Cyclone Conditions of Readiness (COR)

- (1) Tropical Cyclone Condition V. Destructive winds of 50 knots or greater associated with a tropical system are possible at Naval Station, Norfolk within 96 hours.
- (2) <u>Tropical Cyclone Condition IV</u>. Destructive winds of 50 knots or greater associated with a tropical system are possible at Naval Station Norfolk within 72 hours.
- (3) Tropical Cyclone Condition III. Destructive winds are anticipated at Naval Station Norfolk within $48\ hours$.
- (4) Tropical Cyclone Condition II. Destructive winds are anticipated at Naval Station Norfolk within $24\ hours$.
- (5) Tropical Cyclone Condition I. Destructive winds are anticipated at Naval Station Norfolk within 12 hours.

j. Thunderstorm/Tornado Conditions of Readiness

- (1) Thunderstorm/Tornado Condition II. Set by individual stations based upon forecasts from Naval Atlantic Meteorology and Oceanography Center (NLMOC) or their detachments. Thunderstorms or tornadoes are expected within 25 nautical miles of the Naval Station Norfolk within 6 hours. Associated lightning, torrential rain, hail, severe downbursts, destructive winds, and sudden wind shifts are possible. Take precautions that will ensure an appropriate state of readiness on short notice.
- (2) Thunderstorm/Tornado Condition I. Set by individual stations based upon forecasts from Naval Atlantic Meteorology and Oceanography Center (NLMOC) or their detachments. Thunderstorms or tornadoes are occurring, or are forecast to occur in the immediate area within one hour. Associated lightning, torrential rain, hail, severe downbursts, destructive winds, and sudden wind shifts are possible. Take immediate safety precautions and seek shelter.

- k. <u>Wind Storm Conditions of Readiness</u>. When conditions permit sufficient advanced forecasting of impending gale/storm force winds of significant duration, Gale/Storm Conditions of Readiness will be issued as specified below.
- (1) <u>Gale/Storm Condition III (as applicable)</u>. Destructive winds of the force indicated are possible within 48 hours.
- (2) <u>Gale/Storm Condition II (as applicable)</u>. Destructive winds of the force indicated are possible within 24 hours.
- (3) <u>Gale/Storm Condition I (as applicable)</u>. Destructive winds of the force indicated are possible within *12 hours*.
- 1. Sortie Conditions. Sortie conditions are established to support Task Group TG 183.1 (Hampton Roads Sortie Group) requirements to depart well before onset of heavy weather, and will be based on forecast weather along the potential sortie track. Sortie conditions will be set by CTG 183.1 (Hampton Roads Sortie Commander), in consultation with CTF 183 (COMLANTFLT), based upon the estimated onset of destructive winds in Hampton Roads, storm track relationship to evasive routes, and Hampton Roads weather conditions. Anticipated sortie time will be promulgated by message when setting Sortie Conditions.
- (1) <u>Sortie Condition C (Charlie)</u>. Prepare to sortie within 48 hours to avoid heavy weather. Anticipated sortie commencement time will be included in the message setting SORTIE C. Depending on predicted storm track, SORTIE C may be set coincident with Tropical Cyclone Condition V.
- (2) <u>Sortie Condition B (Bravo)</u>. Sortie expected within 24 Hours.
- (3) <u>Sortie Condition A (Alpha)</u>. Commence sortie to avoid heavy weather.
- m. Readiness Commanders. Term associated with afloat commands, i.e., Group/Squadron Commanders.

n. Local SOPA's

(1) SOPA HAMPTON ROADS AREA VA - COMLANTFLT or designated flag officer (may vary; however, location will remain at COMLANTFLT OPCON Center).

- (2) SOPA ADMIN HAMPTON ROADS AREA VA (Commander, Navy Region Mid-Atlantic).
 - (3) SORTIE COMMANDER CTG 183.1 (COMSECONDFLT).
- (4) SOPA ADMIN NORFOLK SUBAREA VA (CO, NAVSTA NORFOLK) SOPA (Admin) Norfolk SUBAREA will coordinate and promulgate Hampton Roads Emergency Sortie/Berthing Plan. NAVSTA Norfolk is the final authority for all berthing issues in the Hampton Roads area. NAVSTA Norfolk Port Operations is the single point of contact to coordinate berthing for ships left behind in the Hampton Roads area. NAVSTA Norfolk will coordinate with NAVSHIPYD Norfolk and will provide information concerning availability of shipyard berthing space.
- o. <u>Capable Commands</u>. Refers to all tenant commands and Regional Program Representatives of NAVSTA Norfolk maintaining/operating radio communication circuits with the ability to monitor/activate heavy weather common and/or heavy weather command circuits.
- p. <u>Host Command</u>. Primary or key command. Maintains coordination over several subordinates or tenant commands within the host command's jurisdiction. The host command will serve as liaison with subordinate commands for SOPA ADMIN NORFOLK SUBAREA.
- ${\tt q.} \quad \underline{{\tt Tenant\ Commands}}.$ Commands within the jurisdiction of host commands.
- r. <u>PD Department Heads</u>. Program Director representatives in the SOPA Admin Norfolk Subarea.
- 6. Condition of Readiness Reporting Timelines. Every attempt must be made to attain the ordered Condition of Readiness (COR) in a timely fashion. Reference (f) will be utilized by Naval Station QD to notify primary commands (bolded) of the ordered setting of a Condition of Readiness. Primary commands (bolded) are responsible for notifying secondary commands listed under them. When the ordered COR is set by the secondary command they will report attainment to their primary command who will in turn report attainment to the Naval Station QD at 322-2365/66/67 when all secondary commands (or exceptions) under them have reported. The following timelines have been set for establishing and reporting attainment of ordered Conditions of Readiness:
 - a. COR III, IV and V 8 hours.

- b. COR II 6 hours.
- c. COR I 2 hours.

7. Sortie and Evasion

- a. None of the harbors in the Hampton Roads area are safe havens during sustained tropical cyclone winds. Evasion at sea is the recommended course of action for all seaworthy vessels when Norfolk is directly threatened with destructive force winds of 50 knots or greater. However, if winds are less than 50 knots, Hampton Roads harbors will normally provide shelter for most pierside ships. Ships with large sail areas and especially aircraft carriers and large deck amphibious ships should usually evade at sea when threatened by greater than 50 knots sustained winds.
- b. The high cost of a Hampton Roads sortie and the low threat frequency of direct tropical cyclone strikes on Hampton Roads encourages a decision to stay. Fleet safety, however, is paramount and must be a key factor in a timely decision to sortie. Any tropical cyclone on a westward track towards Hampton Roads would devastate the fleet, if caught in port.
- c. Timeliness of a sortie decision is essential. Ideally, the Fleet should <u>be prepared and expect to</u> get underway at Condition III. However, the forecast storm track may dictate an earlier start to the sortie. The following time considerations are critical factors of a sortie decision:
- (1) Night sorties should be avoided due to safety of navigation (possible delay of eight hours, or longer).
 - (2) A Norfolk sortie may require up to 12 hours.
- (3) Sea and Anchor details may be longer than normal due to limited harbor pilot assets and shipping congestion.
- (4) Due to potential storm curvature and inherent forecast error, ships may need to transit east nearly 200 NM (37N, 070W) to evade the storm (13 hour transit at 15 knots). This transit will be in less than optimal sea states due to rapid swell propagation in advance of tropical cyclones.

- 8. <u>Action</u>. When directed by SOPA ADMIN HAMPTON ROADS AREA, this Destructive Weather Plan will be executed in accordance with
- references (a) through (f) as required. To provide for maximum readiness and to minimize storm damage, the following responsibilities are delineated:
- a. All afloat commands in the Norfolk SUBAREA will implement procedures necessary to prepare for destructive weather in accordance with reference (d).
- b. In addition to the requirements of reference (d), all Naval Shore Commands and Regional Program Representatives in the Norfolk SUBAREA will:
 - (1) Prepare and maintain destructive weather plans.
- (2) Implement or modify existing instructions and directives to conform with this instruction.
- (3) Prior to 1 June of each year, review all destructive weather plans and directives, ensuring that all assigned military and civilian personnel are familiar with contents.
- (4) Designate personnel as either category "ALPHA" or "BRAVO" in accordance with reference (d). Prior to 1 June of each year, ensure that all personnel are notified of their category assignment to minimize confusion during destructive weather conditions.
- (5) Inform personnel that destructive weather conditions, warnings, and instructions to civilian and military employees will be announced on local TV and radio stations, to ensure individuals will not tie up telephone lines needed for emergency coordination. Personnel can call 444-0000 and select Option 3 for Inclement Weather Updates.
- (6) Ensure that all military and civilian personnel are aware of their local community's Hurricane Shelter Program. Refer to local radio and TV stations for latest shelter information. The Hampton Roads Emergency Management Committee website http://www.hremc.org provides valuable emergency information for all cities in the Hampton Roads area.
- (7) Implement conditions of readiness when notified by SOPA ADMIN NORFOLK SUBAREA.

- (8) To the maximum extent possible, continue to perform critical command functions during destructive weather conditions.
- (9) Render maximum support to afloat commands and fleet aircraft units.
- (10) Use the guidelines published in reference (d) for the administrative dismissal of category "BRAVO" personnel.
- (11) Recall and/or dismissal decisions will be made by the Installation Commander and announced by the Public Affairs Officer to the media.
- (12) SOPA ADMIN NORFOLK SUBAREA will employ every reasonable means to inform commands of an approaching storm, waterspout, or tornado. For destructive windstorms (including thunderstorms, tornadoes, gales, or storm force winds), Commanding Officers take appropriate actions to minimize damage by securing loose objects, hangar/tying down aircraft, etc., in accordance with individual command heavy weather bills. When a tornado warning is issued, safety of personnel becomes the primary concern.
- (13) Be prepared to assist in recovery operations. Perform self-help efforts to restore/maintain command functions.
- (14) Ensure all areas are free from missile hazards as high winds can be expected at any time.
- (15) Save computer data and store disks in waterproof container, secure power to computers and cover other electronic equipment. Relocate vital equipment to high ground.
- (16) Contact NAVSTA Norfolk Operations Center at Condition II (322-2323 or fax 444-0951) if facility is occupied and provide the following:
- (a) A list of essential personnel locations, number of people anticipated occupying these facilities, and a contact phone number.
 - (b) Maintain 72 hours of rations on hand.
- (c) Identify an occupied building by placing a sign stating "BUILDING OCCUPIED" in the highest window of your facility that is visible from the street.

- (17) Relocate high value items to a safe location.
- (18) Correct unsafe conditions within command/department capability as they occur, or report them to NAVSTA CDO.
- (19) Apprise NAVSTA CDO of any structural or material condition that may sustain damage or create a hazard in high winds.
- (20) All host commands and Naval Station Department Heads/Special Assistants will make status reports of all incomplete actions to NAVSTA CDO which impact overall preparation plans.
- (21) Sandbags: Contact Naval Station Disaster Preparedness Division at 444-2298 or 444-2275 to provide approximate number of sandbags needed. Sandbags will be staged in the parking lot for Building SP-233 for pick up when tropical cyclone Condition of Readiness III (COR III) has been set. Commands desiring sandbags must provide their own vehicles and personnel for pick up and placement. Tenant commands are to return them to the staging area after the storm.
- (22) Vehicles should be removed from waterfront parking lots due to extensive flooding that occurs as a result of accompanying storm surges associated with a storm. Naval Station Norfolk will issue a message with alternate parking arrangements prior to a sortie.
- c. As SOPA ADMIN NORFOLK SUBAREA, Commanding Officer, Naval Station Norfolk will be responsible for coordinating actions required for preparation and recovery from destructive weather for the shore establishment within their area of responsibility. This includes:
 - (1) Promulgation of guidance.
- (2) Coordination of working parties for preparation and recovery from destructive weather.
- (3) Coordination of communication with subordinate and tenant commands.
 - (4) Coordination of shelter management responsibilities.

- (5) Coordinate removal of POV's and GOV's from the waterfront.
- (6) Providing assistance to fleet and aircraft units located within area of responsibility.
- (7) Developing priorities to allocate scarce resources to restore critical operations and protect safety and health of personnel.
 - (8) Coordination with SOPA ADMIN Hampton Roads Area, VA.
 - (9) Periodically review and update phone tree.
- d. In addition to actions required in reference (d), actions outlined in enclosures (1), (2) and (8) shall be accomplished within SOPA ADMIN NORFOLK SUBAREA jurisdiction in preparation and/or recovery from destructive weather.

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Distribution: (NAVSTANORVAINST) 5215.3N All NAVSTA Depts/Storefronts All shore commands in Norfolk SUBAREA